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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,396	10/07/2003	Adrian Carter	6548-23-1U	5974
38731	7590	05/05/2006	EXAMINER	
NUFERN 7 AIRPORT PARK ROAD EAST GRANBY, CT 06026			HOFFMANN, JOHN M	
			ART UNIT	PAPER NUMBER
			1731	

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/680,396	CARTER ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	John Hoffmann	1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 13 March 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.
  - 4a) Of the above claim(s) 7 and 8 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6 and 9-11 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

***Election/Restrictions***

Applicant's election with traverse of Species A1, B1 and C2 in the reply filed on 3/13/2006 is acknowledged. The traversal is on the ground(s) that A1& A2; and C1&C2 are not mutually exclusive, and because it is not clear that there would be a burden. This is not found persuasive because for species requirements the Office need not show undue burden. Nevertheless, it is quite clear that from the disclosure that the various modes would require an undue burden see [0047] and [0053] of the specification which lists some of the variations of the methods.

As to the species not being mutually exclusive: Examiner agrees that A1 and A2 are not mutually exclusive for the reasons given by Applicant.

As to C1 and C2, Applicant refers to [0054] in the specification. Examiner could find no mention of solution doping in [0054] or anything suggestive thereof. On the contrary, since the phosphorous pentoxide remains as phosphorous pentoxide, it is never doped. The plain meaning of "doping" to one of ordinary skill in the art is one where the ions are incorporated into the glass network – i.e. where the dopant changes the composition of the glass phase to include the dopant. In [0054] the phosphorous oxide remains as its own phase –within the pores of the soot body.

The requirement is still deemed proper and is therefore made FINAL.

Claims 7-8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected specie, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 3/13/2006.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim1-6 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipate by Evans 5925163 (with Kirkbir 5254508 and Eaton 3904422 to show inherency).

Evans discloses the invention at figure 10 and col. 6, lines 14-20 which discloses that OVD is used to make the preform. One of ordinary skill would infer that the term "OVD" reads on the claimed invention, except for the disposing step (i.e. the last two lines of claim 1).

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From MPEP 2144.01 Implicit Disclosure:

"[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

See also, *In re Fritch*, 972 F.2d 1260, 1264-65, 23 USPQ2d 1780, 1782-83 (Fed. Cir. 1992); *In re Sovish*, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir 1985).

Kirkbir is used to show what the "OVD" encompasses:

The providing step: Col. 1 lines 12-21 disclose the creation of a mandrel coated by germania-silica soot- this soot is glass. Since this coated mandrel comprises glass, it is an "elongated glass article".

First adhering step: see col. 1, lines 21-23 discloses depositing a soot cladding layer – it is clearly disposed about the core.

First sintering step: col. 1, lines 19-21 indicates that the glass is sintered and porous. The voids are interconnect voids: it is noted applicant has not defined "void"; applicant does not use the common meaning of "void" (by virtue of it having gases); and it is accepted in the glass art to have the term "void" include interconnected voids (for example see US Patent to Eaton 3904422, col. 1, lines 10-12).

Second adhering step: See col. 1, line 18 of Kirkbir which discloses multiple layers.

The second sintering step occurs at col. 1, line 24.

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It is noted that Kirkbir is not need to show inherency: The first sintering step does not require voids. The sintering merely has the intended function of "to form a first sintered layer including voids...." Compare to line 9 which indicates that the cladding is "to be disposed" see also the preamble and the other limitations pertaining to the core – it is clear that such are intended results not necessary parts of the claim. Since Applicant uses the "to" limitation to indicate an intention rather an actual result – it is deemed that all "to" limitations can encompass intended results.

A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

The disposing step is disclosed in Evans – layer 71 can be considered the second cladding.

Claim 2 is clearly met.

Claim 11: See col. 4, lines 31-36 of Berkey. The OVD soot would be the first part of the cladding – the voids would be the discrete regions that inherently have a different index of refraction. Tube 47 (figure 6) is the glass without discrete regions.

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Claims 3-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Berkey 5149349.

Figure 6 of Berkey represents the first providing step and the adhering step. (47) is the elongate glass article. See the above discussion which shows that the soot is inherently partially sintered and that such has voids – and/or that the intended “to form a sintered layer including voids...” is merely a mental step/desire that that does not define over Berkey. Feature 30 of figure 4 (and 8) is the second elongate article: 31 is the core and 32 is the different portion. Examiner sees no reason to consider feature 34 to be “voids”. However, if applicant can show features 34 to be voids: it is noted that are any number of portions within the 32 which are free of voids. It is noted that the term “portion” encompasses any portion, however small, at any location. The claim is open to having still further portions that do have voids. Still further: since there are only two features “34” it is deemed that the member is “substantially free of voids” (2 is very near “0”). Figure 8 shows that oversleaving has occurred.

Claim 4 is clearly met.

Claims 5-6 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Zhang 6192713.

See Example 2 of Zhang – starting in col. 22. As to the “only” language of line 9, of claim 5 it is noted that Applicant’s gas or liquid would surely be exposed to other items eventually (end caps, feed-lines, the ambient, etc.) Thus it is deemed that the claim is not intended to preclude other exposure. On closer look, it is noted that claim 5

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appears to require "only" the different layer is exposed "for absorption" – other features can be exposed for other reasons – or for no reason whatsoever.

***Claim Rejections - 35 USC § 103***

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang 6192713 in view of Baumgart 4820322.

Zhang discloses the invention as claimed, except for the provision of a second glass article. See example 2 of Zhang. Baumgart discloses that overcladding can increase the productivity of the MCVD process (col. 1, lines 57-65 for instance). It would have been obvious to increase the productivity of the Zhang process by using the Baumgart productivity increasing teachings – i.e. by providing an overcladding tube and overcladding the core preform with it.

Claim 10 is clearly met.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 and 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1: There is no antecedent basis for "the cladding" at the second to last line. It is noted that there is no indication that a cladding is actually ever formed prior to the second cladding. The claim only requires soot that is for forming portions of the cladding. There is no indication that the step of forming is necessary.

The phrase "when present" is indefinite as to its meaning, most notably, it is unclear where it must be present. For example, if a core-type structure is somewhere within the same factory, city or even state, it is unclear whether the elongate glass article must be "for forming a portion".

At line 1 of claim 1, "for being disposed" reads on a nebulous mental step conducted prior to the manipulative steps of the claimed process, hence rendering the present process claim unclear in meaning in scope. If applicant wishes to patent detail controls over the recited process, the process steps must be positively recited. See Seagram & Sons Inc. vs Marzall, 84 USPQ 180. The same applies to the "for forming", "to form" and other such steps. In other words, it is unclear whether a potential competitor can copy all of applicant's manipulative steps, but not making the tube "for being disposed" rather for some other reason, such as 'for making lots of money'.

This applies to all other limitations in any of the claims which claim a purpose – that can only be detected by mind-reading.

### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kuppers is cited as discussing the division between fully and partially sintering. Roba and Hicks are cited as being cumulative to the applied art.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272-1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John Hoffmann  
Primary Examiner  
Art Unit 1731

5-2-06

jmh